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Education

Ph.D. in Earth and Planetary Sciences, Harvard University, June, 2003.

Thesis title: Linking regional air pollution with global chemistry and climate: The role of background ozone.
A.B. in Environmental Geoscience, *magna cum laude*, Harvard College, June 1997.

Research and Professional Experience

- Research Associate, Atmospheric and Oceanic Sciences Program, Princeton University and NOAA/GFDL, Princeton, NJ, August, 2003-present.
- Graduate Researcher, Harvard Atmospheric Chemistry Modeling Group, Harvard University, Cambridge, MA, September, 1998- June, 2003.
- Co-convener, special science-policy session at the American Geophysical Union Spring Meeting, Washington, D.C., May, 2002.
- Participant, American Meteorological Society Summer Policy Colloquium, Washington, D.C., June, 2001.
- Co-organizer, Department of Earth and Planetary Sciences seminar day, Harvard University, Cambridge, MA, April, 2001.
- Independent Consultant for the Clean Air Task Force, October 1999, February 2000.
- Undergraduate Researcher with Professor Daniel Jacob, June 1995-1997.

Grants and Honors

- Invited ACCESS (Atmospheric Chemistry Colloquium for Emerging Senior Scientists) participant, Sept., 2003.
- National Science Foundation Fellowship, July 1998- July 2002.
- Bok Center Distinction in Teaching Awards, Fall 1998, Fall 1999, Spring 2002.
- Ecole Normale Supérieure Fellowship, Paris, France, Sept. 1997-June 1998.
- *Summa cum laude* honors thesis, Harvard College, June 1997.
- Dean's Research Award Grant, Harvard College, Summer 1996.

Publications

- Martin, R.V., **A. Fiore**, A.V. Donkelaar, Space-based diagnosis of surface ozone sensitivity to anthropogenic emissions, *Geophys. Res. Lett.*, submitted, 2004.
- **Fiore, A.**, T. Holloway, M.G. Hastings, A Global Perspective on Air Quality: Intercontinental Transport and Linkages with Climate, *EM*, December, 2003.
- **Fiore, A.**, D.J. Jacob, H. Liu, R.M. Yantosca, T.D. Fairlie, Q. Li, Variability in surface ozone background over the United States: Implications for air quality policy, *J. Geophys. Res.*, 108, 4787, doi: 10.1029/2003JD003855, 2003.
- Liu, H., D.J. Jacob, J.E. Dibb, **A.M. Fiore**, R.M. Yantosca, Constraints on the sources of tropospheric ozone from ^{210}Pb - ^7Be -O₃ Correlations, *J. Geophys. Res.*, revised, 2004.
- **Fiore, A.M.**, D.J. Jacob, R. Mathur, R.V. Martin, Application of empirical orthogonal functions to evaluate ozone simulations for the eastern United States with regional and global models, *J. Geophys. Res.*, 108, 4431, doi:10.1029/2002JD003151, 2003.

- Holloway, T., **A. Fiore**, M.G. Hastings, Intercontinental Transport of Air Pollution: Will emerging science lead to a new hemispheric treaty?, *Environ. Sci. & Technol.*, 37, 4535-4542, 2003.
- Heald, C.L., D.J. Jacob, **A.M. Fiore**, L.K. Emmons, J.C. Gille, M.N. Deeter, J. Warner, D.P. Edwards, J.H. Crawford, A.J. Hamlin, G.W. Sachse, E.V. Browell, M.A. Avery, S.A. Vay, D.J. Westberg, D.R. Blake, H.B. Singh, S.T. Sandholm, R.W. Talbot, H.E. Fuelberg, Asian outflow and transpacific transport of carbon monoxide and ozone pollution: An integrated satellite, aircraft and model perspective, *J. Geophys. Res.*, 108, 4804, doi:10.1029/2003JD003507, 2003.
- Palmer, P.I. D.J. Jacob, **A.M. Fiore**, R.V. Martin, K. Chance, and T. Kuruso, Mapping isoprene emissions over North America using formaldehyde column observations from space, *J. Geophys. Res.*, 108, 4180, doi:10.1029/2002JD002153, 2003.
- **Fiore, A.M.**, D.J. Jacob, B.D. Field, D.G. Streets, S.D. Fernandes, and C. Jang, Linking ozone pollution with climate change: The case for controlling methane, *Geophys. Res. Lett.*, 29, (19), 1919, doi:10.1029/2002GL015601, 2002.
- **Fiore, A.M.**, D.J. Jacob, I. Bey, R.M. Yantosca, B.D. Field, A.C. Fusco, and J.G. Wilkinson, Background ozone over the United States in Summer: Origin, trend, and contribution to pollution episodes, *J. Geophys. Res.*, 107 (D15), doi:10.1029/2001JD000982, 2002.
- Li, Q., D.J. Jacob, I. Bey, P.I. Palmer, B.N. Duncan, B.D. Field, R.V. Martin, **A.M. Fiore**, R.M. Yantosca, D.D. Parrish, P.G. Simmonds, and S.J. Oltmans, Transatlantic transport of pollution and its effects on surface ozone in Europe and North America, *J. Geophys. Res.*, 107, 4166, 10.1029/2001JD001422, 2002.
- Martin, R.V., K. Chance, D.J. Jacob, T.P. Kurosu, R.J.D. Spurr, E. Bucsela, J.F. Gleason, P.I. Palmer, I. Bey, **A.M. Fiore**, Q. Li, R.M. Yantosca, and R.B.A. Koelemeijer, An improved retrieval of tropospheric nitrogen dioxide from GOME, *J. Geophys. Res.*, (D20), 4437, doi:10.1029/2001JD001027, 2002.
- Martin, R.V., D.J. Jacob, J.A. Logan, I. Bey, R.M. Yantosca, A.C. Staudt, Q. Li, **A.M. Fiore**, B.N. Duncan, H. Liu, P. Ginoux, and V. Thouret, Interpretation of TOMS observations of tropical tropospheric ozone with a global model and in-situ observations, *J. Geophys. Res.*, doi:10.1029/2001JD001480, 2002.
- Bey I., D.J. Jacob, R.M. Yantosca, J.A. Logan, B. Field, **A.M. Fiore**, Q. Li, H. Liu, L.J. Mickley, and M. Schultz, Global modeling of tropospheric chemistry with assimilated meteorology: Model description and evaluation, *J. Geophys. Res.*, 106, 23,073-23,096, 2001.
- Li, Q., D.J. Jacob, J.A. Logan, I. Bey, R.M. Yantosca, H.Liu, R.V. Martin, **A.M. Fiore**, B.D. Field, B.N. Duncan, and V. Thouret, A tropospheric ozone maximum over the Middle East, *Geophys. Res. Lett.*, 28, 3235-3238, 2001.
- Lin, C.-Y. C, D.J. Jacob and **A.M. Fiore**, Trends in exceedances of the ozone air quality standard in the continental United States, 1980-1998, *Atmos. Environ.*, 35, 3217-3228, 2001.
- Palmer, P. I., D. J. Jacob, K. Chance, R. V. Martin, R. J. D. Spurr, T. P. Kurosu, I. Bey, R. Yantosca, **A. Fiore**, and Q. Li. Air mass factor formulation for spectroscopic measurements from satellites: application to formaldehyde retrievals from GOME, *J. Geophys. Res.*, 106, 14,539-14,550, 2001.
- Lin, C.-Y. C, D.J. Jacob, J.W. Munger, and **A.M. Fiore**, *Geophys. Res. Lett.*, 27, 3465-3468, 2000.
- **Fiore, A.M.**, D.J. Jacob, J.A. Logan, J.H. Yin, Long-term trends in ground level ozone over the contiguous United States, 1980-1995, *J. Geophys. Res.*, 103, 1471-1480, 1998.
- Liang, J., L.W. Horowitz, D.J. Jacob, Y. Wang, **A.M. Fiore**, J.A. Logan, G.M. Gardner, and J.W. Munger, Seasonal variations of reactive nitrogen species and ozone over the United States, and export fluxes to the global atmosphere, *J. Geophys. Res.*, 103, 13,435-13,450, 1998.

Invited Talks

- *Variability in surface ozone background over the United States*, EPA Peer Consultation Workshop on the Air Quality Criteria Document for Ozone and Related Photochemical Oxidants, Research Triangle Park, NC, October, 2003.
- *Variability in surface ozone background over the United States: Implications for air quality policy*, Atmospheric Chemistry Colloquium for Emerging Senior Scientists (ACCESS), Yellowstone National Park, WY, September 5, 2003.

- *The Double Dividend of Methane Control*, XIVth Global Warming International Conference & Expo (GWXIV), Cambridge, MA, May 28, 2003.
- *Background Ozone in Surface Air Over the United States*, U.S. EPA Meeting on Developing Criteria for the Chemistry and Physics of Atmospheric Ozone, Adelphi, MD, March 17, 2003.
- *The Double Dividend of Methane Control*, Workshop of the UNECE Task Force on Integrated Assessment Modelling on Linkages and Synergies of Regional and Global Emission Control, IIASA, Laxenburg, Austria, January 28, 2003.
- *Linking ozone pollution with climate change: The case for controlling methane*, U.S. EPA/EMEP Workshop on Hemispheric Pollution, Bad Breisig, Germany, October 8, 2002.
- *Background ozone over the United States in Summer: Origin, trend, and contribution to pollution episodes*, Swiss Federal Institute of Technology (EPFL), Lausanne, Switzerland, February, 2002.
- *Trends in ground level ozone over the continental United States, 1980-1995*, Northeast States for Coordinated Air Use Management meeting, New York City, NY, 1998.

Oral Presentations

- Fiore, A.M., D.J. Jacob, D.G. Streets, B.D. Field, and L.J. Mickley, Linking Air Quality and Climate Change Mitigation Objectives: The Case for Controlling Methane, *Eos. Trans. AGU* 83 (19), Spring Meet. Suppl., Abstract A21C-10, 2002.
- Fiore, A.M., D.J. Jacob, I. Bey, R.M. Yantosca, and B.D. Field. The Origins of Background Ozone in Surface Air over the United States, *Eos. Trans. AGU*, 81 (48), Fall Meet. Suppl., Abstract A22E-02, 2000.
- *The Origins of Background Ozone in Surface Air over the United States*, Electric Power Research Institute, Palo Alto, CA, 2000.

Conference Poster Presentations

- Fiore, A., D.J. Jacob, H. Liu, R.M. Yantosca, T.D. Fairlie, Q. Li, Variability in surface ozone background over the United States: Implications for air quality policy, Atmospheric Chemistry Gordon Research Conference, Big Sky, MT, September 2003.

Teaching Experience

- Teaching Fellow, *An Introduction to Environmental Science: The Solid Earth*, Spring 2001, 2002.
- Participant, Graduate Science Teaching Seminar, Derek Bok Center, Spring 2002.
- Teaching Fellow, *Natural and Environmental Disasters*, Harvard University, Fall 1999.
- Participant in Graduate Writing Fellows Program, Derek Bok Center, Harvard University, Fall 1999.
- Teaching Fellow, *An Introduction to Atmospheric Chemistry*, Harvard University, Fall 1998.

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